DOCUMENT RESUME

ED 035 422 LI 001 826

AUTHOR	Monroe, Elizabeth Jean; Pings, Vern M.
TITLE	Interlibrary Loan Requests for Biomedical Literature Originating from Kentucky, Ohio and Michigan Institutions. Papers and Reports, No. 1.
SPONS AGENCY	National Library of Medicine, Bethesda, Md.
PUB DATE	Feb 69
NOTE	23p.
EDRS PRICE	EDRS Price MF-$0.25 HC-$1.25
DESCRIPTORS	Hospitals, *Interlibrary Loans, *Library Circulation, Library Collections, Library Cooperation, *Library Networks, Library Services, *Medical Libraries, *Regional Libraries
IDENTIFIERS	*Kentucky, Ohio, Michigan Regional Medical Library, KOMRML

ABSTRACT

The first step in the services to be developed by the Kentucky, Ohio, Michigan Regional Medical Library (KOMRML), established under the Medical Library Assistance Act of 1965, is that of improving the document delivery service now provided by the 10 biomedical resource libraries which make up KOMRML. The study reported here was undertaken to determine (1) what interlibrary loan (ILL) services are now provided by participating libraries, (2) if changes in existing services will result with the establishment of service areas, and (3) what part of the National Library of Medicine's (NLM) ILL service can be taken over by KOMRML. All interlibrary loan requests received by participating libraries and NLM (except those received by TWX) were analyzed. The results of this study point to two main considerations for those administering KOMRML. (1) The proposed referral network may or may not be a more efficient system than the existing laissez-faire one; the social value of the KOMRML document delivery system will have to be judged on its cost effectiveness in delivering documents dependably. The heavy users of ILL service in Kentucky, Ohio and Michigan are hospitals; equal access to the library resources to all hospitals would appear to be of prime concern to KOMRML. (Author/JB)

ED035422

LI001826

KENTUCKY - OHIO - MICHIGAN

REGIONAL MEDICAL LIBRARY

ANN ARBOR
UNIVERSITY OF MICHIGAN
HEALTH SCIENCE LIBRARIES

CINCINNATI
UNIVERSITY OF CINCINNATI
MEDICAL CENTER LIBRARIES

CLEVELAND
CASE WESTERN RESERVE UNIVERSITY
CLEVELAND HEALTH SCIENCES LIBRARY

COLUMBUS
OHIO STATE UNIVERSITY
HEALTH CENTER LIBRARY

DETROIT
UNIVERSITY OF DETROIT
SCHOOL OF DENTISTRY LIBRARY
WAYNE STATE UNIVERSITY
MEDICAL LIBRARY

EAST LANSING
MICHIGAN STATE UNIVERSITY
SCIENCE LIBRARY

LEXINGTON
UNIVERSITY OF KENTUCKY
MEDICAL CENTER LIBRARY

LOUISVILLE
UNIVERSITY OF LOUISVILLE
KORNHAUSER HEALTH SCIENCES LIBRARY

TOLEDO
MEDICAL COLLEGE OF OHIO AT TOLEDO
MEDICAL LIBRARY

PAPERS AND REPORTS, NO. 1

INTERLIBRARY LOAN REQUESTS FOR BIOMEDICAL LITERATURE

Originating from

KENTUCKY, OHIO, AND MICHIGAN INSTITUTIONS

by
Elizabeth Jean Monroe
and
Vern M. Pings

POSITION OR POLICY.

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

*Supported in part by USPHS Grants LM 00020-02 and LM 00628-01

LI001826

Detroit
February 1969

The first step in the services to be developed by the Kentucky, Ohio, Michigan Regional Medical Library (KOMRML) established under the Medical Library Assistance Act of 1965 is that of improving the document delivery service now provided by biomedical resource libraries. The Act specifies that regional medical libraries are "...to provide supportive services to other libraries in the region as well as to individual users of library services..." Further, the National Library of Medicine in administering the regional medical library grant program has interpreted the Act to mean that federal funds should not be used to supplant any existing services; federal funds can be used only to expand and to improve existing services or to start new services.

Although a paper is forthcoming describing the rationale and administrative organization of KOMRML, a short explanation of its organization is perhaps necessary to put the contents of this report into perspective. KOMRML is an administrative structure formed by agreement among 10 academic biomedical libraries, Wayne State University (WSU), Michigan State University (MSU), University of Detroit (UD), The University of Michigan (UM), Cleveland Health Sciences Library (CHSL), Medical College of Ohio at Toledo (MCOT), Ohio State University (OSU), University of Cincinnati (UC), University of Louisville (UL), University of Kentucky (UK), to make the academic biomedical library resources available to the region. Each of the 10 participating libraries had an extramural document delivery program of some kind in operation before the establishment of KOMRML. Since the KOMRML grant cannot be used to support existing services, the next obvious step to improve access to documents is to create a method for switching requests for the documents the participating library cannot supply. Organizationally, the participating library will act as the library of first recourse for institutions initiating interlibrary loans (ILL) within its service area which is defined geographically and/or through affiliation or other agreements. Each participating library can thus improve its ILL service by referring requests it cannot fill to one of the KOMRML participating libraries or the National Library of Medicine (NLM) to complete.

Although simple in concept, the task of reducing the switching procedures into actual operations requires the reorientation of work flows and routines in each of the participating libraries, as well as the establishment of rules for borrowing libraries. The study reported here was an effort to obtain information to provide a basis for organizational and budgetary planning. The specific objective was (i) to determine the existing flow of ILL requests through the resource libraries of KOMRML, (ii) to identify natural referral patterns, and (iii) to estimate the number of requests that would be subject to referral.

METHOD

During the four week period, October 14 through November 8, 1968, NLM supplied a copy of all ILL requests it received by mail from Kentucky, Ohio, and Michigan (KOM) before it attempted to fill the request. (Requests

received by TWX are not included in the sample.) Each of the participating libraries of KOMRML analyzed the ILL requests it received for the same period to determine:

1. How many of the requests originated from KOMRML;

2. What institutions made requests;

3. The reasons for inability to fill requests; and

4. What items were not supplied.

The data from NLM and the participating libraries for each request were tabulated by the origin of the request, irrespective of the resource library to which the request was made. Unfortunately, in designing the data collecting procedures no provision was made for identifying whether unfilled requests originated from a KOM institution. All reports of unfilled requests submitted by participating libraries and all requests submitted to NLM were checked against existing published serials lists of participating libraries, the Union List of Serials and New Serial Titles to determine if the items were owned by one of the participating libraries. Serial holdings lists were available only from UM, WSU, UD, CHSL, and UL. Finally, each of the requesting institutions was "assigned" to one of the participating libraries as belonging to the latters' service area.

FINDINGS AND DISCUSSION

During the study period, 3,072 ILL requests were made to nine of the participating libraries, of which 2,799 originated from KOM institutions.* (See Table 1.) NLM received 546 requests from KOM institutions (See Table 2) making a total of 3,345 requests that were generated by KOM institutions for four weeks. Some of these requests are for the same item, i.e., a library tried to obtain an item, was unsuccessful, and then requested it of another library** Although it would have been useful to determine the number of duplicate requests in assessing the referral loads for KOMRML, the time period of the study was too short to collect such information even if a practical way had been found to trace all requests. Participating libraries collectively were able to fill 85% of the ILL requests made of them.

---

* At the time of the study the Medical College of Ohio at Toledo had not as yet begun a formal interlibrary lending program. (No requests were received during the period of the study.)

** The number of attempts that must be made to secure an item through ILL procedures has not been studied in any systematic manner. Smith found that two of every 10 ILL requests require one, or more, additional attempts before the item was secured; Cruzat reports that one of every 10 ILL request requires at least one additional attempt. Cf. Smith, J.M.B. "Interlibrary Loan Service at Children's Hospital of Michigan". Wayne State University Medical Library and Biomedical Information Service Center, Report No. 16, Detroit, Sept. 1965; Cruzat, G.S. "An Evaluation of Interlibrary Loan Service, Wayne State University Medical Library. IV. Determination of Cost of Processing Interlibrary Loans, Borrowing Transaction." Wayne State University Medical Library and Biomedical Information Service Center, Report No. 29, Detroit, March 1967.

Table 1

Interlibrary Loan Activity of the Kentucky, Ohio, Michigan (KOM)
Regional Medical Library
Participating Libraries
October 14 - November 8, 1968

	Participating Libraries									
	WSU	MSU	UD	UM	CHSL	OSU	UC	UL	UK	TOTAL
Number of Requesting Institutions	82	39	5	83	17	50	18	35	64	
In KOM	76	20	5	39	9	21	17	14	30	
Non-KOM	6	19	0	44	8	29	1	21	34	
Number of Requests	1256	100	15	232	780	192	147	130	220	3072
In KOM	1246	70	15	165	772	154	146	103	128	2799
Non-KOM	10	30	0	67	9	38	1	27	92	274
Total Number Requests Filled	1105	84	15	225	632	145	112	104	164	2586
In KOM	1099	62	15	162	628	122	111	83	95*	2377
Non-KOM	6	22	0	63	4	23	1	21	69*	209
Total Not Filled by Participating Libraries**	151	16	0	7	148	47	34	26	56	485

* Estimated
** Includes requests originating within and without KOM

Table 2

Number of ILL Requests Submitted to NLM from KOM Institutions
Distributed by Service Area, Received
October 14 - November 8, 1968

	Participating Library Service Areas									
	WSU U D	MSU	U M	MCOT	CHSL	OSU	U C	U K	U L	TOTAL
Number of Requesting Institutions	22	11	7	5	15	6	18	3	6	96
Number of Requests*	126	56	58	37	116	19	106	9	19	546
Number of Requests Available in Region	82	42	18	30	87	8	78	9	14	368
Unavailable	44	14	40	7	29	11	28	0	5	178

* Includes requests from participating libraries.

Although only 127 ILL requests to WSU (of the total 1,256 received) were for texts and monographs, the "satisfaction rate" of filling these requests was only 60%, whereas requests for serials could be supplied at a 90% rate. Thus, even though the number of requests for texts and monographs is small, the ability of WSU to respond to the requests lowers the satisfaction rate considerably. One of the problems that must be investigated, if the experience at WSU is representative, is the cost-effectiveness of referrals for texts and monographs against creating a bibliographic source that can be made available to KOM borrowing libraries to consult before making ILL requests. From the information available from the NLM and from a study undertaken by Orr*, it has been estimated that KOM institutions initiate approximately 95,000 ILL per year of which NLM processes almost 10%. The 95,000 figure was arrived at from calculations made from a sample generated from the 1966-67 requests made to NLM which showed that NLM processed 10,000 requests for KOM. From the four week sample of this study, NLM would process about 7,100 requests per year from KOM under present conditions. This is 30% less than was estimated from the 1966-67 sample. Reconciling estimates is a futile game. Assuming that NLM does process 10% of the requests generated by KOM institutions, and that the sample from this study period is representative, then the total ILL requests for the year for the region would approach 71,000. On the basis of the figures collected during the study, participating libraries collectively process 36,400 of these requests per year within the KOM region.

---

* Letter, Richard Orr, M.D. October 8, 1968; memorandum, Samuel Waters, October 9, 1968.

Table 3

Estimated Interlibrary Loan
Requests for KOM per Year

Requests made to	Number per year
National Library of Medicine	7,100
Participating Libraries	36,400
Other Libraries	27,500
Total	71,000

Several observations can be made:

(i) Participating libraries are now processing over one-half the ILL requests for biomedical material in KOM.

(ii) Since approximately 65% of the requests now made to NLM could be supplied from the collections of participating libraries (see below), KOMRML can expect to increase ILL processing by approximately 4,900 requests per year after it becomes operational.

(iii) KOM institutions are now submitting over 27,500 ILL requests to libraries other than NLM and the participating libraries.

(iv) If KOMRML were to take over the responsibility for processing requests made to NLM, plus those now processed by other libraries, the ILL load for KOMRML would more than double.

(v) It is clear that even if funds were made available, it is administratively impractical for KOMRML to take on the responsibility for processing all biomedical ILL requests. The existing interinstitutional agreements and arrangements that now exist to support the processing of 27,500 requests per year must be maintained.

Requests outside KOM

Participating libraries processed 275 ILL requests for institutions outside KOM at a satisfaction rate of about 75%. Although 274 requests are only about 9% of the total processed, most of them were received by four of the participating libraries constituting a proportionately large share of their biomedical ILL service. KOMRML can assume responsibility for processing requests only within KOM. Because of the creation of KOMRML, should participating libraries now refuse to process requests received outside of KOM? Participating libraries are recognized resource libraries owning unique items. Can they rightfully deny access

to these materials to institutions outside KOM? If they do take such a position, then supposedly requests made by participating libraries to institutions outside KOM will similarly be refused. Either participating libraries will have to continue to operate under the quid pro quo tradition, or some inter-regional system of switching requests must be developed.

Service area requests

KOMRML document delivery service is essentially a referral service based on the establishment of a service area. Each participating library is assuming the responsibility as to a resource library of first recourse for the institutions in its area. To what extent is each participating library now serving its area, and once service areas are established, what is the expected increase in the number of requests to be processed, and finally how many of the requests will have to be referred?

To gain a perspective of the actual operation of the present ILL network, all the requests received by participating libraries and NLM were assigned to a service area irrespective of which library received the request. When the data for this study were tabulated, the service areas had only been roughly defined. The service area was arbitrarily defined by drawing geographic boundaries along county lines. Adjustments in this arbitrary definition of service area have since been made and they will continue to be made as experience is gained in operating the KOMRML ILL network; however, these adjustments will probably not alter significantly the conclusions for this study. Using the arbitrarily defined service areas, the requests received by the participating libraries and NLM during the test period were tabulated according to their service area origin. (See Table 4)

One of every six requests initiated by KOM institutions was submitted to a participating library which, under the KOMRML plan, would be considered other than the library of first recourse. To attempt to rationalize this situation from the data available is a dangerous enterprise, but if KOMRML is to replace a dependable ILL network for the present laissez-faire network, intuitive (and hazardous) guesses as to the causal factors must be made. ILL librarians work within constraints and attempt to do their work in the most efficient and expeditious way at the least cost to their institution. Request will be made,

(i) Only to libraries that are known to own the item requested,

(ii) To the library that will provide the most efficient service, and

(iii) To the library that will provide the document for the least cost.

Table 4

Interlibrary loan requests processed by KOMRML participating libraries,
October 14 - November 8, distributed by service area

Requests Received at:	Participating Library Service Areas										Total Requests Received	Total Received Outside of Service Area
	WSU	MSU	UD	UM	CHSL	MCOT	OSU	UC	UL	UK		
Wayne State University	1156*	63	0	19	1	7	0	0	0	0	1246	90
Michigan State University	4	42*	0	16	4	2	2	0	0	0	70	28
University of Detroit	0	0	15*	0	0	0	0	0	0	0	15	0
University of Michigan	44	65	0	39*	3	6	5	1	1	1	165	126
Cleveland Health Sciences Library	0	0	0	0	771*	0	0	1	0	0	772	1
Medical College of Ohio at Toledo	0	0	0	0	0	0*	0	0	0	0	0	0
Ohio State University	0	0	0	0	18	1	122*	11	2	0	154	32
University of Cincinnati	0	0	0	0	2	0	0	141*	2	1	146	5
University of Louisville	0	0	0	0	1	0	0	1	89*	12	103	14
University of Kentucky	1	0	0	0	0	1	1	20	83	22*	128	106
Total	1205	170	15	74	800	17	130	175	177	46	2799	402
National Library of Medicine**	126	56	0	58	116	37	19	106	19	9	546	546
Total requests submitted in each service area	1331	226	15	132	916	54	149	281	196	45	3345	948

*Number underlined indicates the requests received at participating library originating from its own service area. Other numbers in row indicate requests received from other service areas. The numbers in columns indicate requests received by other participating libraries originating from service area indicated at the top of the column.

**From Table 2

What the KOMRML network is in effect proposing is that these decisions in initiating ILL requests are to be the responsibility of participating libraries to make. The success of the KOMRML network will depend upon whether this centralization of ILL processing can be done at less cost than the present system. If the 402 requests which were sent to NLM were submitted to these libraries because the ILL librarian knew that the item requested was not available except at the library to which the request was sent, then the proposed KOMRML would be replacing an efficient system with a costly (and at least in the beginning) complex method of securing a document. The data from this study would indicate that ILL librarians are not that informed. First, the distribution pattern demonstrated by the number of institutions shows that they apparently "experimented" in submitting requests (See Tables 5, 6, 7, 8, 9). Second, at least 368 requests submitted to NLM were available within KOMRML and over 200 of the requests sent to participating libraries were sent to a library where the request could not be filled. (See Table 11) However, it should be emphasized that although the data of this study would indicate the KOMRML network might provide a better social investment for document delivery service than the existing service, it has yet to be demonstrated.

Number of institutions

Table 1 and Table 2 give the number of institutions that have made requests to participating libraries and to NLM during the four week period. Although some institutions applied to more than one library a total of 206 KOM institutions generated 3,345 requests. The number and type of institutions from each service area are tabulated in Table 5. The number of requests each type of institution generated in each service area is tabulated in Table 6.

From the summary in Table 7 it can be seen that hospitals constitute 50% of the requesting institutions and generate two-thirds of the requests. Interestingly, the two largest metropolitan areas have the greatest proportion of their requests from hospitals. This is perhaps understandable in that this is where the greatest proportion of teaching-research hospitals would be located. If it can be assumed that the need for ILL service from hospitals arose because of patient care problems, the existing ILL interlibrary loan program and the KOMRML referral service is related to health care. If the four week study is an indication of the normal pattern of ILL flow, the responsibilities of KOMRML are clear. Effort should be directed toward upgrading access to the library resources for hospitals. Although it cannot be expected that all institutions which need access to biomedical literature would necessarily have made a request during the study period, that only 100 of the 700 hospitals in the region did make requests would indicate that there are many hospitals which are ill-equipped to utilize ILL service or are unaware that it is available*.

---

*Cf. Rees, A., et al. Feasibility Study for Continuing Education of Medical Librarians. Interim Report No. [1] and 2. Center for Documentation and Communication Research. January-July, 1968.

Table 5

Number of each type of institutions requesting ILL from Service Areas
October 14 - November 8, 1968

Area	Hospital	Industry & Commerce	Government Organizations	Educational Organizations*	Foundations	Public Libraries	Professional Societies	Total
Wayne State University	37	12	2	6	2	0	1	60
Michigan State University	14	4	1	7	1	1	0	28
University of Detroit				1				1
University of Michigan	4	5	0	5	0	0	1	15
Cleveland Health Sciences Library	25	2	2	11	0	0	0	40
Medical College of Ohio at Toledo	1	1	0	2	0	2	1	7
Ohio State University	4	2	1	4	0	0	1	12
University of Cincinnati	9	5	4	4	1	1	0	24
University of Louisville	6	2	2	3	0	0	0	13
University of Kentucky	2	0	2	2	0	0	0	6
Total	102	33	14	45	4	4	4	206

*Includes participating libraries

Table 6

Number of requests from each type of institution in each Service Area

Type of Institution	Participating Library Service Areas										TOTALS
	WSU	MSU	UD	UM	CHSL	MCOT	OSU	UC	UL	UK	
Hospital (includes government)	1101	82	4	7	784	1	31	125	67	15	2217
Industry and Commerce	68	80	1	76	10	3	7	46	9	0	300
Government Organizations (federal, state, municipal)	12	13	0	0	9	0	19	78	54	15	200
Educational Organizations (includes participating libraries)	49	43	10	46	113	31	20	25	65	15	417
Foundations	98	7	0	0	0	0	0	6	0	0	111
Public Libraries	0	1	0	0	0	5	0	1	1	0	8
Professional Societies	3	0	0	3	0	14	72	0	0	0	92
Totals	1331	226	15	132	916	54	149	281	196	45	3345

Table 7

Summary of requesting institutions and number of requests made (from Table 5 and Table 6)

Type of Institutions	Number	Percent of Total	Number of Requests	Percent of Total
Hospitals (including government)	102	50	2217	67
Industrial Organizations	33	16	300	9
Government Organizations (other than hospitals)	14	7	200	6
Educational Organizations (including participating libraries)	45	22	417	12
Foundations	4	2	111	3
Public Libraries	4	2	8	0.3
Professional Societies	4	2	92	3
Totals	206		3345	

Distribution of requests by institution made to participating libraries and NLM

During the four weeks of the study 147 of the 206 institutions sent requests to but one of the participating libraries or to NLM (but not recessarily to their service area library). The remaining 59 institutions contacted at least one other library to secure a document. Table 8 summarizes how many of the 43 institutions submitted requests to more than one source, including NLM, and which sources were contacted. Table 9 indicates the number of types of institutions which contacted three or more libraries to obtain documents; for example, there were five hospitals that submitted requests to WSU and one to UC; four of these six hospitals in turn sent ILL requests to UD, two of them to UM, one to UK, and all six submitted requests to NLM. Because of the shortness of the study period the representation of the interinstitutional flow of requests cannot be determined. One observation, however, can be made: one-third of the hospitals had to contact two or more institutions in order to secure documents. Because of the number of hospitals in the sample, this becomes a significant figure and supports the argument above that one of the early concerns of KOMRML is to establish a dependable document delivery service for hospitals.

Analysis of unfilled requests

As admitted earlier, the design in the data collecting was inadequate in that for the requests not completed, no distinction was made for those originating from KOM institutions and those from outside KOM. An examination of the data does, however, demonstrate the ability of participating libraries to provide an ILL service and gives understanding of the general problems involved with the service, as well as provide an indication of possible referral load.

All but 16% of the requests submitted to participating libraries were filled. Of the 485 uncompleted requests, 50% were not filled because the library did not own the title and/or the volume. (See Table 10) Since only 1% of the requests received could not be filled because the item was missing, the housekeeping and record keeping of the participating libraries is above average considering that they are all open stack libraries serving a diverse and demanding population. Five percent of the requests were not completed because the item had not been received; this figure appears to be high since it is doubtful that many requests would have been generated from Current Contents. At Wayne State University during the past five years, the percentage of unfilled requests because the item was in the bindery varied from 10% to 16%. The 12% figure of the study data would appear to be within normal limits. Although 8% of the requests were not completed because the reference was unidentifiable, this constituted only 1% of the total requests received. This compares very favorably with the requests received at NLM where almost 7% of the requests contained inadequate references (a total of 36 of the 546 requests).

Since all but those requests in which the reference was incomplete or the item is non-circulating can be considered suitable for referral (less the unfilled requests from institutions outside KOM) the referral load from participating libraries should be approximately 4,700 requests per year. How would this referral load be distributed?

Table 8

Number and type of institutions that contacted two participating libraries for ILL, October 14 - November 8, 1968

Types of Institutions	Service Area	Other Libraries Contacted		Service Area	Other Libraries Contacted	Service Area	Other Libraries Contacted	Service Area	Other Libraries Contacted	Service Area	Other Libraries Contacted		Service Area	Other Libraries Contacted	Service Area	Other Libraries Contacted	Total
	WSU	NLM	UM	MSU	UM	UM	MSU	CHSL	NLM	OSU	NLM	UM	UC	NLM	UL	NLM	
Hospitals (including government)	14	13	1	0	0	0	0	9	9	0	0	0	1	1	1	1	25
Industry	0	0	0	0	0	0	0	0	0	1	1	0	2	2	1	1	4
Government Organizations	0	0	0	0	0	0	0	0	0	1	1		2	2	1	1	4
Educational Institutions	2	1	1	4	4	1	1	0	0	1	0	1	0	0	0	0	8
Foundations	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Professional Societies	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1
Total	17			4		1		9		4			5		3		43

Table 9

Number and types of institutions within each service area which contacted more than one other participating library or NLM
October 14 - November 8, 1968*

Type of Institution	Service Area Origin						Total	Other Libraries Contacted								
	WSU	MSU	UM	CHSL	UC	UL		WSU	MSU	UD	UM	OSU	UC	UL	UK	NLM
Hospitals (including government)	5	0	0	0	1	0	6	0	0	4	2	0	0	0	1	6
Industry	1	1	2	0	0	0	4	1	3	0	2	0	0	0	0	4
Government Organizations	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	0
Education (including participating libraries	1	0	0	1	2	1	5	1	1	0	2	2	1	2	1	4
Total	7	2	2	1	3	1	16									

*For interpretation of table, see text

Table 10

Analysis of Interlibrary Loan Requests not Completed
by the
Kentucky, Ohio, Michigan Participating Resource Libraries
October 14 - November 8, 1968

Reasons Requests Were Not Filled	Participating Libraries								Total	Percent of Total	Percent of Total Requests
	WSU	MSU	UM	CHSL	OSU	UC	UL	UK			
In Circulation	4	0	0	26	2	8	2	1	43	9	1
Not Received	10	2	1	3	6	2	0	0	24	5	<1
Bindery	21	0	1	9	3	10	7	9	60	12	2
Missing	11	1	0	16	6	1	2	9	46	9	1
Reference Unidentified	12	2	0	17	3	2	2	3	41	8	1
Title Not Owned	73	5	3	31	13	6	7	16	154	32	5
Volume Not Owned	18	5	1	31	10	3	5	15	88	18	3
Non-circulating	0	0	1	5	4	2	1	3	16	3	<1
Other	2	1	0	10	0	0	0	0	13	3	<1
Total	151	16	7	148	47	34	26	56	485		

Referral of requests

Since the objective of KOMRML is to equalize access to the health science library resources of the region, answers to several questions need to be found to create an organization for switching document requests to realize this equality of access. Specifically, what adjustments must each participating library make in its present services to accommodate tthe objective of KOMRML document delivery service?

(i) Will there be an increase in requests because of the establishment of service areas?

(ii) How many requests will have to be referred?

(iii) How will the requests which now go to NLM be distributed?

The last row of Table I shows the number of requests received at each of the participating libraries which could not be completed, a total of 485. From Table 2 it can be seen that 368 of the 546 requests made to NLM could have been completed by one of the participating libraries. The 1,031 requests (the 485 uncompleted requests from participating libraries and the 546 requests made to NLM) were checked for availability from WSU. The items WSU could not have filled were then checked against the serials lists available from other participating libraries. The checking of these lists was not done in any particular sequence. The results of the checking are displayed in Table II. The distribution as depicted in this Table should not be construed as the actual referral pattern that would or should necessarily develop; it reflects more the sequence of checking rather than practical referral procedures. It is assumed that referral requests would be made to the nearest participating library owning the item. Further, by mid-1969, UK and MSU will have published serials holdings lists and CHSL will have an updated list. This exercise was undertaken to obtain some insight into the capabilities of KOMRML and to obtain an estimate of the possible referral load that will have to be accepted by KOMRML.

A possible referral load can be estimated from the data in Table II if several conditions are accepted:

(i) The test period of the study is representative of the actual ILL flow for KOM both quantitatively and qualitatively,

(ii) The items requested from NLM were unavailable to the requesting institution from its service area,

(iii) Requests made to NLM by participating libraries were not available in the region, and

(iv) All of the requests are unique, i.e., none are requests for the same item to different libraries.

Table 11

Availability in KOMRML of items requested which were reported as unfilled by participating libraries and requested by NLM
October 14 - November 8, 1968

	Requests Received At									Requests Received at NLM	Total
	WSU	MSU	UM	CHSL	OSU	UC	UL	UK	Total		
Total unfilled requests*	151	16	7	148	47	34	26	56	485	546	1031
Items available at**											
Wayne State University	20***	3	0	28	22	11	11	37	132	288	420
University of Detroit	5	0	0	0	0	0	0	0	5	7	12
University of Michigan	13	3	0	3	2	0	1	1	23	45	68
Cleveland Health Sciences Library	16	0	0	0	1	0	0	0	17	17	34
University of Louisville	22	0	0	0	1	0	0	0	23	10	33
Michigan State University	0	0	0	0	0	0	0	0	0	1	1
Total	76	6	0	31	26	11	12	38	200	368	568
Remainder of unfilled requests	75	10	7	117	21	23	14	18	285	178	463

*From Table 1

**Rows indicate the number of the 485 unfilled requests reported by participating libraries and the 546 requests made to NLM which are available at participating library at left; columns give the number of unfilled requests reported by the participating library at the head of the column which are available from the participating library at the left.

***Requests received at WSU Medical Library which are available from other WSU library units.

Using the figures summarized in Table 12, the estimated annual number of requests that will have to be referred is approximately 9,750 of which 2,480 would have to be sent to NLM. An additional 1,200 requests would be generated by participating libraries for NLM because the items are not available within the region. The number of requests to be sent to NLM from the KOM region should eventually drop by approximately 50%, assuming the same level of interlibrary loan activity as in the study sample. Since close to 70% of the ILL requests now sent to NLM can be filled by participating libraries and 40% of the unfilled ILL requests now received by individual participating libraries can be filled by other participating libraries, KOMRML can approach a 90% satisfaction rate for ILL requests generated in KOM.

Alteration of ILL processing

Once service areas are established, how will this affect the pattern of processing ILL requests for participating libraries? From Table 4 the number of requests made within each service area is known, the total requests processed by each participating library is shown, and from Table 11 the number of possible referrals is indicated. By recombining these figures (Table 13) we can arrive at an estimate of the increase or decrease in the present ILL program of each participating library. In summary, KOMRML participating libraries should be processing over 1,100 requests per month more than they do now. Since only 760 of these requests are, by KOMRML policy, suitable for referral, the participating libraries collectively will have to augment their own services to accommodate the processing of an additional 360 ILL requests every four weeks, an increase of 12%. The establishment of KOMRML cannot, therefore, be considered to be a windfall for participating libraries.

Cost

Under the conditions of the grant from NLM to establish KOMRML, only the out-of-pocket cost for supplying or referring an ILL request is to be charged to the grant. Each KOMRML ILL request processed, whether referred or filled, will be compensated at the rate of $1.00 per transaction. In addition, each referral request filled by facsimile copy will be compensated at the rate of 10¢ an exposure, or if supplied in the original a compensation of $1.00 is made to the participating library from the grant. In other words, the out-of-pocket cost to participating libraries has been calculated to average $3.00 for each transaction; $1.00 for referring a request and $2.00 for filling the request.

According to this four week study, participating libraries are already supplying ILL requests at a rate of 31,000 items per year for KOM institutions and processing an additional 5,500 requests for institutions outside KOM for a total out-of-pocket cost of approximately $67,500 per year using the above standard. With the establishment of service areas, an additional 4,000 items will have to be supplied not subject to KOMRML support. Participating libraries will be spending a minimum of $72,000 per year to support their ILL programs.

Table 12

Number of ILL referral requests for KOMRML for a four week period

Number of KOMRML unfilled requests plus requests made to NLM		1,031
Less unreferrable requests submitted to participating libraries (Table 5)	81	
Less unreferrable requests submitted to NLM	36	
Less unreferrable unfilled requests received from institutions outside KOM	65*	
Total	182	
Total referrable requests		849
Less number available and referrable within KOM	568**	
Number to be sent to NLM, composed of		281
Participating library requests	90	
KOM referral requests	191	

*Estimate from Table 1

**Includes some requests received from institutions outside KOM which are not subject to referral under KOMRML policies.

Table 13

Increase or decrease in ILL processing for participating libraries per four week period calculated from sample of requests received October 14 - November 8, 1968

	Participating Library Service Area										
	WSU	MSU	UD	UM	CHSL	MCOT	OSU	UC	UL	UK	TOTAL
Total request submitted in each service area (including participating libraries)	1331	226	15	132	916	54	149	281	196	45	3345
Less loans received by participating library from own service area	-1556	-42	-15	-39	-771	0	-122	-141	-89	-22	-2397
Increase of requests to be processed from service area	175	184	0	93	145	54	27	140	107	23	948
Present processing load	1246	70	15	165	772	0	154	146	103	128	2799
Difference in processing load	+85	+156	0	-33	+144	+54	-5	+135	+93	-83	+546
Possible referral requests for processing	420	1	12	68	34	0	0	0	33	0	568
Total increase or decrease	+505	+157	+12	+35	+178	+54	-5	+135	+126	-83	+1114

spending a minimum of $72,000 per year to support their ILL programs. Within KOMRML there is an estimated additional 25,000 ILL requests that are processed and supplied by other than the participating libraries and NLM.

As noted above, close to 10,000 additional ILL requests will be handled by participating libraries. About 7,400 will be processed within KOMRML at a cost of $22,000 ($1.00 for referring requests, plus $2.00 for supplying documents). Close to another 2,500 will have to be referred to NLM for completion. The total cost to KOMRML in establishing the ILL referral service will approach $25,000 per year. This, of course, does not take into account any of the administrative costs of tabulating, billing, and accounting. The actual cost to provide an ILL service has probably never been accurately determined. Although the out-of-pocket expenses can be calculated, this in no way takes into account the capital investment a resource library must make to be in a position to fill requests, nor have the costs of maintaining resource libraries been allocated to any dependable degree to any of its services, much less its ILL operation. The social system that has developed over the decades by librarians has been based on good-will and their ability to convince society that it is a worthwhile investment to make even though it can not be precisely defined and budgeted.

SUMMARY AND OBSERVATIONS

With the establishment of KOMRML a study was undertaken to determine (i) what ILL services are now provided by participating libraries, (ii) if changes in existing services will result with the establishment of service areas, and (iii) what part of NLM's ILL service can be taken over by KOMRML.

All interlibrary loan requests received by participating libraries and NLM (except those received by TWX) were analyzed. Assuming the sample is representative and assuming other untested conditions, the following general statements can be made:

(i) KOMRML participating libraries are now processing over 36,000 ILL requests a year.

(ii) NLM is processing over 7,000 ILL requests per year from KOM institutions.

(iii) Over 27,000 ILL requests for biomedical materials apparently have been processed by other than the libraries participating in this study.

(iv) About 10% of the ILL requests now processed by participating libraries are for institutions outside KOM.

(v) Participating libraries are supplying requests made to them at a "satisfaction rate" of about 85%.

(vi) One of every six requests initiated by KOM institutions was submitted to a participating library other than the library which would be considered the library of first recourse.

(vii) One-half the requesting institutions were hospitals, the majority of which were located in or near the two largest metropolitan areas of KOM.

(viii) Over two-thirds of the requesting institutions submitted ILL requests to only one of the participating libraries or to NLM.

(iv) One-third of the institutions submitted requests to more than one library; almost one-half of this group were hospitals.

(x) Close to 500 requests were submitted to participating libraries and could not be filled. Of these, 85% were deemed suitable for referral under KOMRML rules.

(xi) With the establishment of service areas to take over the requests now sent to NLM, participating libraries will have to process an additional 14,000 requests per year.

(xii) Under the present organization only about 10,000 of the increased load of requests expected with the establishment of KOMRML are reimbursable for out-of-pocket expense to participating libraries.

This study points up two admonishments for those administering KOMRML: (i) The proposed referral network may or may not be a more efficient system than the existing laissez-faire one; the social value of the KOMRML document delivery system will have to be judged on its cost effectiveness in delivering documents dependably. (ii) The heavy users of ILL service in KOM are hospitals; equal access to the library resources to all hospitals would appear to be of prime concern to KOMRML.

ACKNOWLEDGEMENTS

The collection of the data for this study required each of the eleven contributing libraries to alter their normal routines. The willingness of the interlibrary loan librarians to contribute information is a testimony to their desire that better interlibrary loan service be established in the region.